

**CITY OF
CHICAGO**



Richard J. Daley
Mayor

**DEPARTMENT
OF
PUBLIC WORKS**

MARSHALL SULOWAY
ACTING COMMISSIONER

RAPID TRANSIT EXTENSION TO O'HARE INTERNATIONAL AIRPORT VIA THE KENNEDY EXPRESSWAY

**application of the City of Chicago
for a**

**Mass Transportation
Capital Improvement Grant
under the**

**Urban Mass Transportation
Act of 1964 as amended**

► PRELIMINARY - JUNE, 1974



RAPID TRANSIT EXTENSION
TO O'HARE INTERNATIONAL AIRPORT
VIA THE KENNEDY EXPRESSWAY

A PRELIMINARY APPLICATION

BY THE CITY OF CHICAGO

TO THE URBAN MASS TRANSPORTATION ADMINISTRATION

UNDER THE

URBAN MASS TRANSPORTATION ACT OF 1964, AS AMENDED

AND

TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION

UNDER THE STATE TRANSPORTATION BOND ACT OF 1971.

PRELIMINARY APPLICATION - O'HARE EXTENSION

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I. Proof of Incorporation

Submitted to certify that the City of Chicago is an eligible applicant for Federal and State mass transit funds.

II. Ordinance Authorizing the Mayor to File a Preliminary Grant Application to the Urban Mass Transportation Administration and the Illinois Department of Transportation.

Submitted as intent of the City's commitment to the project.

III. Planning Reviews

- A. Chicago Plan Commission's Review and Comments
- B. Northeastern Illinois Planning Commission's (NIPC) Review and Comments

IV. Proposal

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V. Reference Appended: Study of A Ground Access System for O'Hare International Airport, Volumes I-II, produced for the City of Chicago by Alan M. Voorhees, Inc., 1973-74.

NOTE: The environmental impact statement is being prepared and will be submitted at a later date. All other information and assurances will be submitted in the final application.

I. PROOF OF INCORPORATION

I. Proof of Incorporation

The attached certificate is submitted to certify that the City of Chicago is an eligible applicant for Federal and State mass transit grant awards.

In addition, the City's previous experience in accepting and administering similar Federal and State mass transit grant awards is verification of the City's eligibility as an applicant for Federal and State financial assistance.

GENERAL CERTIFICATE

I. JOHN C. MARCIN, DO HEREBY certify as follows:

1. I am the duly elected, qualified and acting City Clerk of the City of Chicago (herein called the "Local Public Agency"). In such capacity, I am custodian of certain of its records as required by law and familiar with its organization, membership and activities.

2. The proper and correct corporate title of the Local Public Agency is CITY OF CHICAGO.

3. The Local Public Agency was duly created pursuant to the authority of the Constitution and statutes of the State of Illinois, including particularly, the act of March 4, 1837, (Illinois General Assembly) and was duly organized on the 4th day of March, 1837; and since the date of its organization, the local Public Agency has continued to exist without interruption in the performance of its public corporate purposes.

4. The names and dates of election or appointment, and the dates of the beginning and ending of the terms of office, of the members of the governing body of the Local Public Agency and of its principal officers are as follows:

<u>NAME OF OFFICE</u>	<u>DATE OF ELECTION</u>	<u>DATE OF COMMENCEMENT OF TERM OF OFFICE</u>	<u>DATE OF EXPIRATION OF TERM OF OFFICE</u>
Richard J. Daley MAYOR	4-6-71	4-21-71	Approximately 1st Tuesday, April, 1975 and until successor elected and qualified

NAME OF OFFICE	DATE OF ELECTION	DATE OF COMMENCEMENT OF TERM OF OFFICE	DATE OF EXPIRATION OF TERM OF OFFICE
John C. Marcin City Clerk	4-6-71	4-21-71	Approximately 1st Tuesday April, 1975 and until successor elected and qualified
Joseph Bertrand City Treasurer	4-6-71	4-21-71	"
Fred B. Roti Alderman	2-23-71	4-14-71	"
William Barnett Alderman	8-15-71	8-16-71	"
Tyrone T. Kenner Alderman	2-23-71	4-21-71	"
Timothy C. Evans Alderman	11-27-73	11-29-73	"
Leon M. Despres Alderman	2-23-71	4-21-71	"
Eugene Sawyer Alderman	2-23-71	4-12-71	"
Gerald E. Jones Alderman	11-27-73	11-29-73	"
William Cousins, Jr. Alderman	2-23-71	4-21-71	"
Alexander A. Adduci Alderman	2-23-71	4-14-71	"
Edward R. Vrdolyak Alderman	2-23-71	4-21-71	"
Michael A. Bilandic Alderman	2-23-71	4-21-71	"
George A. Kwak Alderman	6-5-73	6-8-73	"
John S. Madrzyk Alderman	11-27-73	11-29-73	"
Edward M. Burke Alderman	2-23-71	4-21-71	"

NAME OF OFFICE	DATE OF ELECTION	DATE OF COMMENCEMENT OF TERM OF OFFICE	DATE OF EXPIRATION OF TERM OF OFFICE
Francis X. Lawler Alderman	2-23-71	4-7-71	Approximately 1st Tuesday, April 1975 and until successor elected and qualified.
Anna R. Langford Alderman	2-23-71	4-12-71	"
William H. Shannon Alderman	2-23-71	4-21-71	"
Edward J. Hines Alderman	2-23-71	4-7-71	"
Thomas F. Fitzpatrick Alderman	2-23-71	4-21-71	"
Clifford P. Kelley Alderman	2-23-71	4-7-71	"
Bennett M. Stewart Alderman	2-23-71	4-7-71	"
Frank D. Stemberk Alderman	2-23-71	4-16-71	"
Joseph Potempa Alderman	4-6-71 (RESIGNED OCTOBER 30, 1973)	4-16-71	"
David Rhodes Alderman	2-23-71	4-22-71	"
Vito Marzullo Alderman	2-23-71	4-15-71	"
Stanley M. Zydlo Alderman	2-23-71	4-14-71	"
Eugene Ray Alderman	2-23-71	4-7-71	"
Jimmy L. Washington Alderman	2-23-71	4-7-71	"
LeRoy Cross Alderman	7-3-73	7-5-73	"
Elmer R. Filippini Alderman	2-23-71	4-7-71	"


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Christopher B. Cohen 2-23-71 4-12-71
Alderman

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043 : : #a n-us-il

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#c by the City of Chicago to the Urban Mass Transportation Administration, under the Urban Mass Transportation Act of
1964, as amended, and to the Illinois Department of Transportation, under the State Transportation Bond Act of 1971.

260 : : #a Chicago : #b City of Chicago, Dept. of Public Works, #c {1974}.

300/1 : : #a 52 leaves in various foliations : #b ill. ; #c 28 cm.

500/1 : : #a "June, 1974"--Cover.

500/2 : : #a Folded plan in pocket.

650/1 : 0: #a Local transit #z Illinois #z Chicago #x Design and construction.

690/1 : 9: #a Ch W.232.

690/2 : 9: #a Ch W.258.

690/3 : 9: #a Ch W.259.

710/1 :10: #a Chicago (Ill.). #b Dept. of Public Works.

710/2 :10: #a Illinois. #b Dept. of Transportation.

710/3 :10: #a United States. #b Urban Mass Transportation Administration.

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6 245 10 Rapid transit extension to O'Hare International Airport via the Kennedy Expressway : lb a preliminary application / lc by the City of Chicago to the Urban Mass Transportation Administration, under the Urban Mass Transportation Act of 1964, as amended, and to the Illinois Department of Transportation, under the State Transportation Bond Act of 1971.

7 260 Chicago : lb City of Chicago, Dept. of Public Works, lc [1974].

8 300 52 leaves in various foliations : lb ill. : lc 28 cm.

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11 699 9 Ch W.232.

12 699 9 Ch W.258.

13 699 9 Ch W.259.

14 650 0 Local transit lz Illinois lz Chicago lx Design and construction.

15 710 10 United States, lb Urban Mass Transportation Administration, lw

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16 710 10 Illinois, lb Dept. of Transportation, lw cn

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 Kennedy Expressway : lb a preliminary application / lc by the City of Chicago
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 12 699 9 Ch W.258.
 13 699 9 Ch W.259.
 14 650 0 Local transit lz Illinois lz Chicago lx Design and
 construction.
 15 710 10 United States. lb Urban Mass Transportation Administration. lw
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 16 710 10 Illinois. lb Dept. of Transportation. lw cn

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 Dates: 1974.

NAME OF OFFICE	DATE OF ELECTION	DATE OF COMMENCEMENT OF TERM OF OFFICE	DATE OF EXPIRATION OF TERM OF OFFICE
Thomas E. Keane Alderman	2-23-71	4-21-71	Approximately 1st Tuesday, April 1975 and until successor elected and qualified
Theris M. Gabinski Alderman	2-23-71	4-21-71	"
Rex Sande Alderman	2-23-71	4-21-71	"
Wilson Frost Alderman	2-23-71	4-8-71	"
Casimir Laškowski Alderman	2-23-71	4-14-71	"
John F. Aiello Alderman	2-23-71	4-21-71	"
Thomas J. Casey Alderman	2-23-71	4-21-71	"
Thomas W. Cullerton Alderman	11-27-73	11-29-73	"
Anthony C. Laurino Alderman	2-23-71	4-15-71	"
Seymour Simon Alderman	2-23-71	4-21-71	"
Roman Pucinski Alderman	6-5-73	6-8-73	"
Burton F. Natarus Alderman	2-23-71	4-8-71	"
William S. Singer Alderman	2-23-71	4-21-71	"
Dick Simpson Alderman	2-23-71	4-16-71	"
Edwin P. Fifielski Alderman	2-23-71	4-21-71	"
Christopher B. Cohen Alderman	2-23-71	4-12-71	"

NAME OF OFFICE	DATE OF ELECTION	DATE OF COMMENCEMENT OF TERM OF OFFICE	DATE OF EXPIRATION OF TERM OF OFFICE
John J. Hoellen Alderman	2-23-71	4-14-71	Approximately 1st Tuesday, April 1975 and until successor elected and qualified
Marilou McCarthy Hedlund Alderman	2-23-71	4-21-71	"
Paul T. Wigoda Alderman	2-23-71	4-21-71	"
Bernard Stone Alderman	7-3-73	7-6-73	

5. Each of the above named officers to do so has duly taken and filed his oath of office and each of them legally required to give bond or undertaking has filed such bond or undertaking in form and amount as required by law and has otherwise duly qualified to act in the official capacity above designated, and each is the acting officer holding the respective office or offices stated under his name.

6. None of the above named officers is ineligible to hold or disqualified from holding, under the provisions of applicable law, the respective office, specified above, which he holds.

7. Since December 23, 1955 (except as noted below) there have been no changes in or amendments to charter, by-laws, ordinances, resolutions or proceedings of the Local Public Agency with respect to:

- (a) The time and place of and other provisions concerning regular meetings of the Local Public Agency;
- (b) The provisions concerning the calling and holding of special meetings of the Local Public Agency and the business which may be taken up at such meetings;

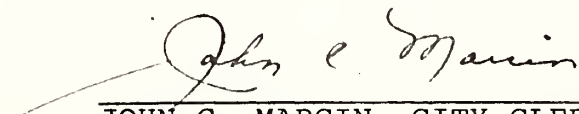
- (c) The requirements concerning a quorum;
- (d) The manner in which the charter or by-laws of the Local Public Agency may be amended;
- (e) The requirements regarding the introduction, passage, adoption, approval and publication of resolutions, ordinances or other measures, relating to the approval and execution of contracts of the Local Public Agency;
- (f) The officers required to sign, countersign or attest contracts of the Local Public Agency;
- (g) The office of the Local Public Agency, or
- (h) The seal of the Local Public Agency;

except as follows:

Meetings set for 10:00 A.M. in lieu of 10:30 A.M. under Ordinance passed March 4, 1958, page 7340 of the Journal of Proceedings.

8. The seal impressed below, opposite my signature, is the duly adopted, proper and only official corporate seal of the Local Public Agency.

IN WITNESS WHEREOF, I have hereunto set my hand and the duly adopted official seal of the Local Public Agency the 1st day of
May , 1974 .



JOHN C. MARCIN, CITY CLERK

- II. Ordinance Authorizing the Mayor to File a Preliminary Grant Application to the Urban Mass Transportation Administration and the Illinois Department of Transportation.

II. Ordinance Authorizing the Mayor to File a Preliminary
Grant Application to the Urban Mass Transportation
Administration and to the Illinois Department of
Transportation.

See attached certified copy of ordinance. It is submitted as verification of the City's intent and commitment to the project.

Ordinance will be processed through the City Council
after the Chicago Plan Commission review.

III. PLANNING REVIEWS

III. Planning Reviews

A. Chicago Plan Commission's Review and Comments

(See attached).

B. Northeastern Illinois Planning Commission's
Review and Comments.

(See attached)

IV. PROPOSAL

IV. Proposal

A. Introductory Note

In 1971, the City of Chicago retained the consultant, Alan M. Voorhees, Inc., to study a ground access system for O'Hare International Airport. As part of the study, the consultant examined the alternative means of linking the CBD with O'Hare. The four alternatives examined and considered feasible were all rail systems. The consultant's study recommended one of the four systems, and the City of Chicago's proposal is, in substance, the alternative recommended by the consultant.

Although the City's proposal incorporates the consultant's overall design, it varies with the consultant's study in three major respects:

1. Cumberland Station

An additional station with bus terminal and Park-n-Ride facility at Cumberland Avenue has been included in the City's proposal.

2. Intra-Airport Station

This station, which connects the O'Hare Extension and the future Intra-Airport (IA) system, is eliminated in the City's Proposal. See Section D, Detailed Description for an explanation of IA system.

3. Project Costs

City's new cost estimate differs from the original cost estimate. The changes in cost are described in detail in Section G, Project Costs.

This preliminary grant application will also be filed with the Illinois Department of Transportation as well as with the Federal Urban Mass Transportation Administration. For a delineation of the costs by funding sources, see Section G, Project Costs.

IV. Proposal (continued)

B. Need for the Project

The continued growth of airline traffic and its related activity at O'Hare International Airport will place increasing stress on the supporting ground access system. The annual passenger enplanement level was 15 million in 1969. By contrast, the projected level of passenger enplanement in 1983 is expected to be 30 million passengers. The City of Chicago retained the consultant, Alan M. Voorhees, Inc., to prepare a regional access plan that would meet O'Hare's general access needs at the 30 million annual passenger-enplanement level. The consultant's recommendation is to extend rail rapid transit service from Jefferson Park to O'Hare in order to alleviate the stress on the ground access system.

Some of the consultant's findings which underlie the consultant's recommendation of a rail system alternative are as follows: (following citations refer to Voorhees' Study)

1. The existing ground access system is the network of highways around the airport. The critical capacity constraint in the present and future highway access systems is the Kennedy Expressway through the interchange with the Tollway (Volume Two, p. 61).
- 2.a. Table II-4 (Volume One, p. 16) indicates that the CBD will continue to decline in relative importance as a generator of air passenger trips. However, this Table also indicates that the absolute number of air passenger trips generated in the CBD will grow at a rate of 4.5% per year. In 1983, 29.8% of all departing air passengers will originate their trip in the CBD. Table II-7 (Volume One, p. 20) indicates that the CBD will decline in relative importance as a destination for arriving passengers, but that the absolute number of arriving passengers destined for the CBD will increase. In 1983, 26.3% of arriving passengers will be destined for the CBD.
- b. The number of airport employees will increase from approximately 20,000 now to approximately 31,000 in 1983 (Volume One, p. 25). Table II-9 (Volume One, p. 26) indicates that the present and future distribution of airport employee residence will remain the same. The distribution indicates that nearly half the employees will live in the City.

IV. Proposal

B. Need for the Project (continued)

- 2.c. It follows from the above two findings that this sheer numerical increase will place increased stress on the highway access system at a point where the capacity constraint is critical, namely, the Kennedy Expressway through the interchange with the Tollway.
3. Given the high volume and a limited amount of corridor space, it follows that a rail access system is a reasonable alternative. Since the CBD would be the origin and destination of such a large number of air passengers, since the CBD would be a major transfer point for O'Hare employees who use public transportation, and since there are 18 miles between O'Hare Field and the CBD, it follows that these two concentrated areas of high transit activity should be linked by a rail rapid transit system.
4. Table V-14 (Volume One, p. 93) indicates that the forecasted demand of the O'Hare Extension is expected to be 35,700 daily ridership in 1983. It should be noted that 11,000 of the 35,700 are non-airport oriented. Most of the 11,000 would be commuters who would board at intermediate stations between Jefferson Park and O'Hare and who would be headed for the Chicago CBD.

Thus, there is a need to alleviate the stress on O'Hare Field's existing ground access system. The City of Chicago proposes to alleviate the stress by extending the Kennedy Rapid Transit line from Jefferson Park to O'Hare Field.

IV. Proposal (continued)

C. General Description

As early as 1958, the City of Chicago constructed electric rail rapid transit facilities in the median of the Eisenhower Expressway. This efficient and economic use of transportation corridor space was copied later in the construction of rapid transit facilities in the medians of the Dan Ryan and Kennedy Expressways during the period 1968-1969.

Rapid transit service in the median of the Kennedy Expressway was placed in operation on February 1, 1970. The new facilities extended the Milwaukee rapid transit service of the West-Northwest Route from Logan Square (coordinates 2600 North and 3200 West) to the new terminus at Jefferson Park station (coordinates 5000 North and 5400 West), a distance of 5.2 miles. The new terminal station is situated in the median of the Kennedy Expressway. On the same day this new rail extension was placed in operation, the CTA also started the #40 O'Hare express bus service. The #40 bus route provides express bus service between the Jefferson Park Station and O'Hare Field, via the Kennedy Expressway.

In this grant request, the City of Chicago proposes to extend the Kennedy Rapid Transit line from its present terminus at Jefferson Park to O'Hare International Airport. This would extend the existing two-track CTA system. The two-track extension would be constructed in the median of the Kennedy Expressway from Jefferson Park to the Illinois Tollway. At this juncture, the extension would leave the Expressway median, cross under the inbound roadway of the Illinois Tollway, and continue on the median of the O'Hare Access Road. The extension will then leave the median of the O'Hare Access Road and go into a single-track subway to loop the air terminal area in a pattern paralleling the roadways which presently serve the air terminal buildings.

IV. Proposal (continued)

D. Detailed Description

The new track will connect with existing track just south of Foster Avenue. An existing inspection shop just north of Foster Avenue must be demolished to make way for the O'Hare Extension. The shop was built as a temporary facility when constructed in 1969. From Foster Avenue, the two-track route will continue north and west in the median of the Kennedy Expressway to Harlem Avenue. The intermediate station at Harlem Avenue will be west of, and immediately adjacent to, the Harlem Avenue Bridge over the Kennedy Expressway. In the approach to the station, the track alignment will be widened to allow room between the tracks for the center-island type of station platform. Because of this widening in the track alignment, the track will be brought closer to the roadway. For safety, concrete barrier walls will be constructed between the rapid transit right-of-way and the roadway. The platform at this station as well as all other stations in the proposed extension will be able to accommodate 10-car trains. The station entrance and fare collection area will be at bridge/street level. Stairs, escalators, and elevators will be provided for vertical movement from station entrance level to platform level at this, and every other station. Escalators and elevators are included in order to provide accessibility for the handicapped as required by UMTA.

Other facilities at Harlem Avenue will include a 1350-car Park-n-Ride facility, a 27-car Kiss-n-Ride area, and a bus terminal facility. The Park-n-Ride facility will be a two-level structure which is to be built in the air rights over the roadways and median of the Kennedy Expressway, west of the Harlem Avenue Bridge. There will be direct access between the Expressway and the Park-n-Ride facility. The bus terminal facility will allow safe off-street bus loading and unloading. All these facilities are designed to facilitate bi-modal trip-making (bus-rail, auto-rail, auto-bus).

From Harlem Avenue, the Extension will continue westward in the median of the Kennedy Expressway to Cumberland Avenue. The Cumberland Station will not be connected to the Cumberland Bridge. Instead, it will be connected to a pedestrian overpass which will span the Expressway at a point west of the Cumberland Bridge. The track will be widened to allow room between the tracks for the center-island type of station platform. For safety, concrete barrier walls will be constructed between the rapid transit right-of-way and the roadway.

IV. Proposal

D. Detailed Description (continued)

Before describing other facilities at Cumberland Avenue, the existing and proposed highway interchange should be described first. The interchange between the Kennedy Expressway and Cumberland Avenue is a full, four-part cloverleaf. Plans call for a reconstruction of this interchange which will result in the elimination of the entrance and exit ramps in the southwest quadrant of the cloverleaf. A traffic signal on Cumberland Avenue south of the bridge over the Expressway will enable the reconstructed southeast quadrant of the cloverleaf to carry out the traffic-flow functions previously carried out by the southwest quadrant of the cloverleaf. See drawing of interchange in pocket folder.

Facilities at Cumberland will include an 800-car Park-n-Ride facility, a 70-car Kiss-n-Ride area, and a 3-bus terminal facility. The Park-n-Ride facility will be a two-level structure located south of the Expressway and west of Cumberland Avenue, with direct access between Cumberland Avenue and the Park-n-Ride facility.

The bus terminal facility and the Kiss-n-Ride area will be located immediately west of the Park-n-Ride facility. Access to Cumberland Avenue from the bus terminal facility and the Kiss-n-Ride area will be via Bryn Mawr Avenue which is an east-west street located approximately one city block south of the two facilities. All three facilities will occupy land which is presently used for the southwest quadrant of the cloverleaf.

From Cumberland Avenue, the Extension will continue westward to a point just west of East River Road where it will leave the median of the Kennedy Expressway and cross under the inbound roadway of the Illinois Tollway to the median of the O'Hare Access Road. Continuing westward in the median of the O'Hare Access Road, the Extension will cross over the Des Plaines River and continue to Des Plaines River Road where the third intermediate station will be located. At Des Plaines River Road the station platform will be above street level.

IV. Proposal

D. Detailed Description (continued)

Facilities at the Des Plaines River Road Station will include a 2,000-car Park-n-Ride lot, a 37-car Kiss-n-Ride area, an 85-car CTA employee parking lot, a maintenance shop, and a transportation office building with a control tower. Just west of the station, a storage yard for approximately 200 rapid transit cars will be constructed. With the exception of the Park-n-Ride lot, all of these facilities can be accommodated in the median of the Access Road because the median is very wide at this point.

The Park-n-Ride lot will be located on vacant highway right-of-way north and west of the station. Access to the Park-n-Ride lot will be from Des Plaines River Road at a point north of the outbound lanes of the O'Hare Access Road. The lot will be connected to the station by a pedestrian tunnel. The pedestrian tunnel will also connect the maintenance shop, the transportation office building, the CTA parking lot, and the Kiss-n-Ride area with the station. Thus, all major facilities at this site are linked by the pedestrian tunnel.

From Des Plaines River Road, the Extension will continue westward in the median of the O'Hare Access Road to a point where the Access roadway loops the passenger terminal area. At this point the Extension will go into a single-track subway and loop the terminal area in a pattern paralleling the roadway. The subway will be between the roadway and the terminal buildings, going partially under the buildings. Each of the three passenger terminal buildings will have a station. Direct access will be provided between the station platform and the terminal building.

The looping subway tunnel will have two levels: (1) a lower level in which a single track will be shared by the CTA Extension and a future Intra-Airport (IA) system; and (2) an upper level which will accommodate a future People Distribution System (PDS). An IA system would interconnect the domestic terminal area, the cargo terminal area, and the future international terminal area which is to be located in the northeast corner of the airport where the Air Force is now based.

IV. Proposal

D. Detailed Description (continued)

The international terminal is presently one of the three terminal buildings which are on the subway loop. After the international operations are re-located, then an IA system would connect the domestic, cargo, and international terminals. A PDS system, which will occupy the upper level, would connect, in a closed-loop fashion, the three passenger terminal buildings with each other as well as with the finger-type concourses where the gates are located. In order to construct a PDS and an IA system at a later date, tunnels in the area of the domestic terminal buildings must be provided now.

At a point near old Mannheim Road where the Extension would still be in the median of the O'Hare Access Road, the consultant Voorhees had proposed a transfer station to connect the CTA and future IA systems. This station would allow passengers bound for the future international terminal to transfer to an IA system at this point. The international terminal has not been re-located, so there is no need to construct the station at this time. However, plans allow for the future construction of the station at the location proposed in the Voorhees Study.

Substations

The project facilities will include substations and power distribution facilities to serve the route extension, together with line supervision, train phone and telephone facilities providing the same functions as on the present system.

The sites for the three substations will be: (1) at O'Hare Field; (2) at Des Plaines River Road; and (3) at Canfield Avenue, which is between Harlem and Cumberland Avenues.

CTA Operations

This grant request includes the purchase of 70 rapid transit cars. The cost estimate for these cars is based on bids under current consideration by the CTA.

THE HISTORY OF THE

The first part of the history of the world is the history of the human race. It is a history of the progress of the human mind, of the growth of the human soul, of the development of the human character. It is a history of the human race, of the human mind, of the human soul, of the human character.

The second part of the history of the world is the history of the human race. It is a history of the progress of the human mind, of the growth of the human soul, of the development of the human character. It is a history of the human race, of the human mind, of the human soul, of the human character.

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The fourth part of the history of the world is the history of the human race. It is a history of the progress of the human mind, of the growth of the human soul, of the development of the human character. It is a history of the human race, of the human mind, of the human soul, of the human character.

IV. Proposal

D. Detailed Description (continued)

Cars serving O'Hare Airport might be modified to accommodate air travelers' baggage.

In the overall network of CTA service, the proposed Extension would be directly linked to the existing West-Northwest rapid transit route which, roughly, follows Milwaukee Avenue to the CBD, goes into the Dearborn Street subway, and emerges onto the median of the Eisenhower Expressway at a point just east of Halsted Street.

The proposed Extension will be linked to CTA bus operations. Project facilities include proposed bus terminal facilities at the three intermediate stations to accommodate bus feeder routes. Further linkages will be planned by the CTA.

For further information about existing CTA service, the yellow-bound volume of the CTA's Phase II grant application, dated January, 1974, should be consulted. This document is on file at UMTA and IDOT.

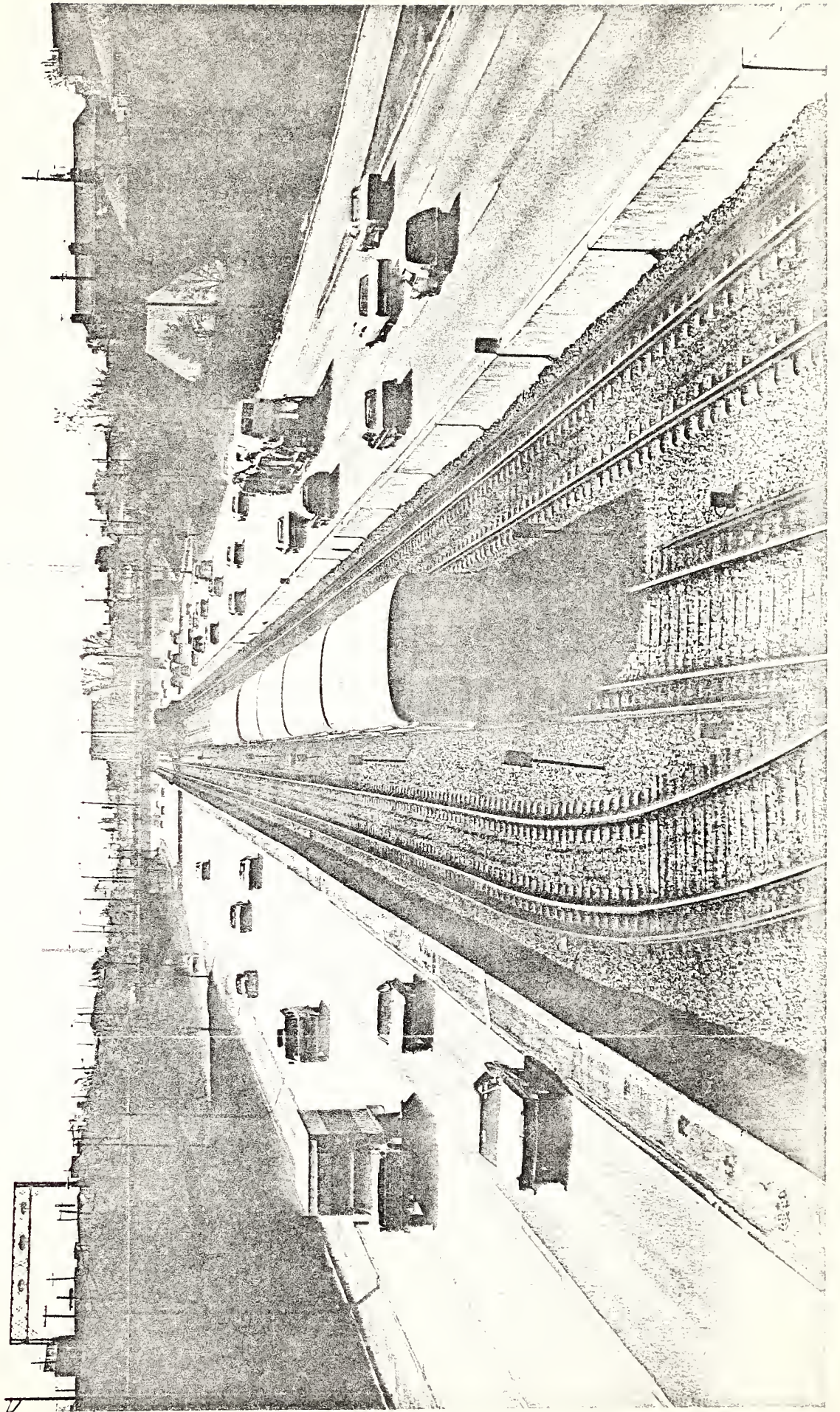


IV. PROPOSAL, (continued)

E. Photographs with Narrative Description

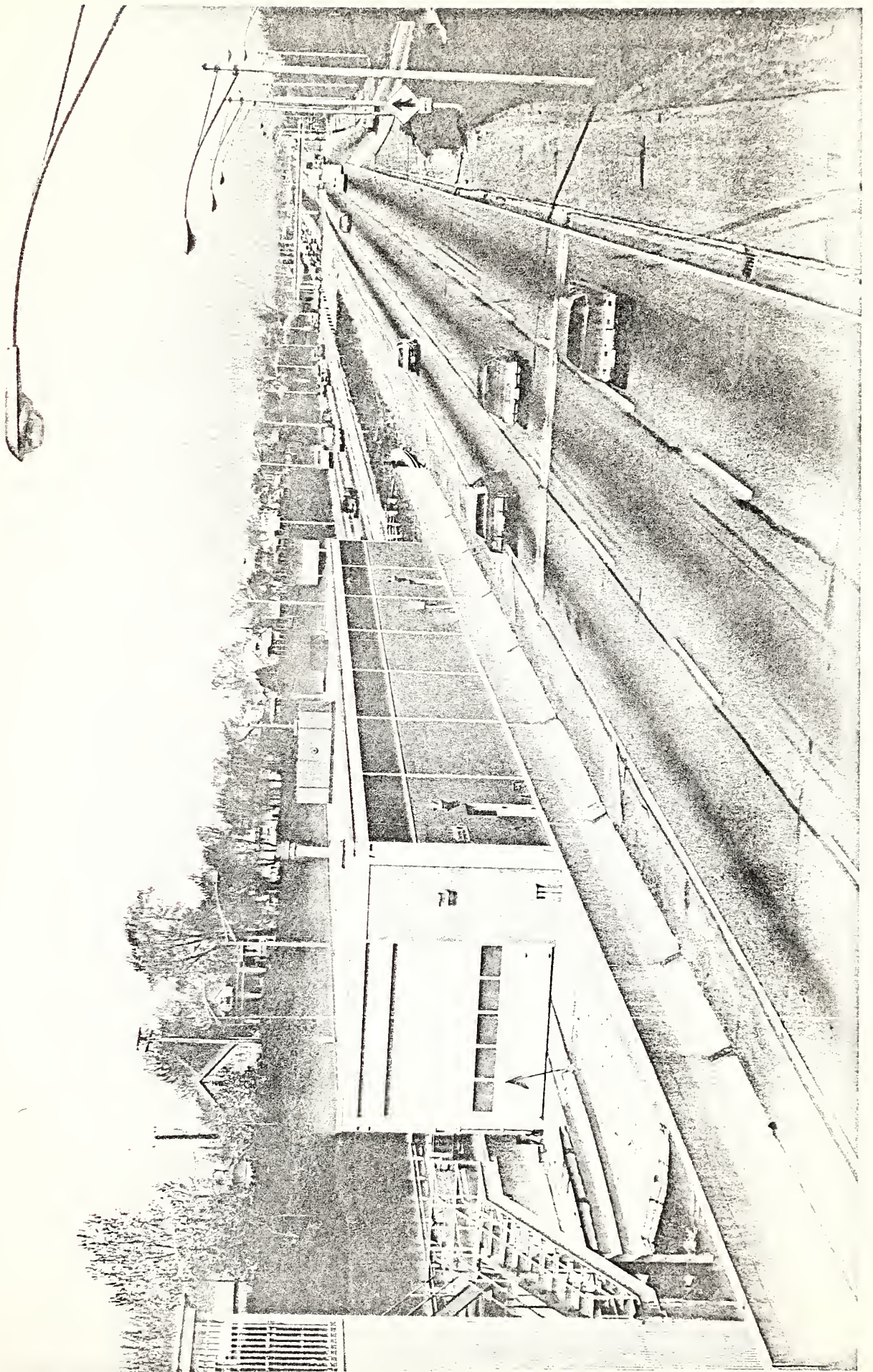
PHOTOGRAPH #1

Photograph #1 shows the point of interconnection between existing track and proposed extension to O'Hare. The view is looking inbound toward the CBD from the Foster Avenue bridge over the Kennedy Expressway.



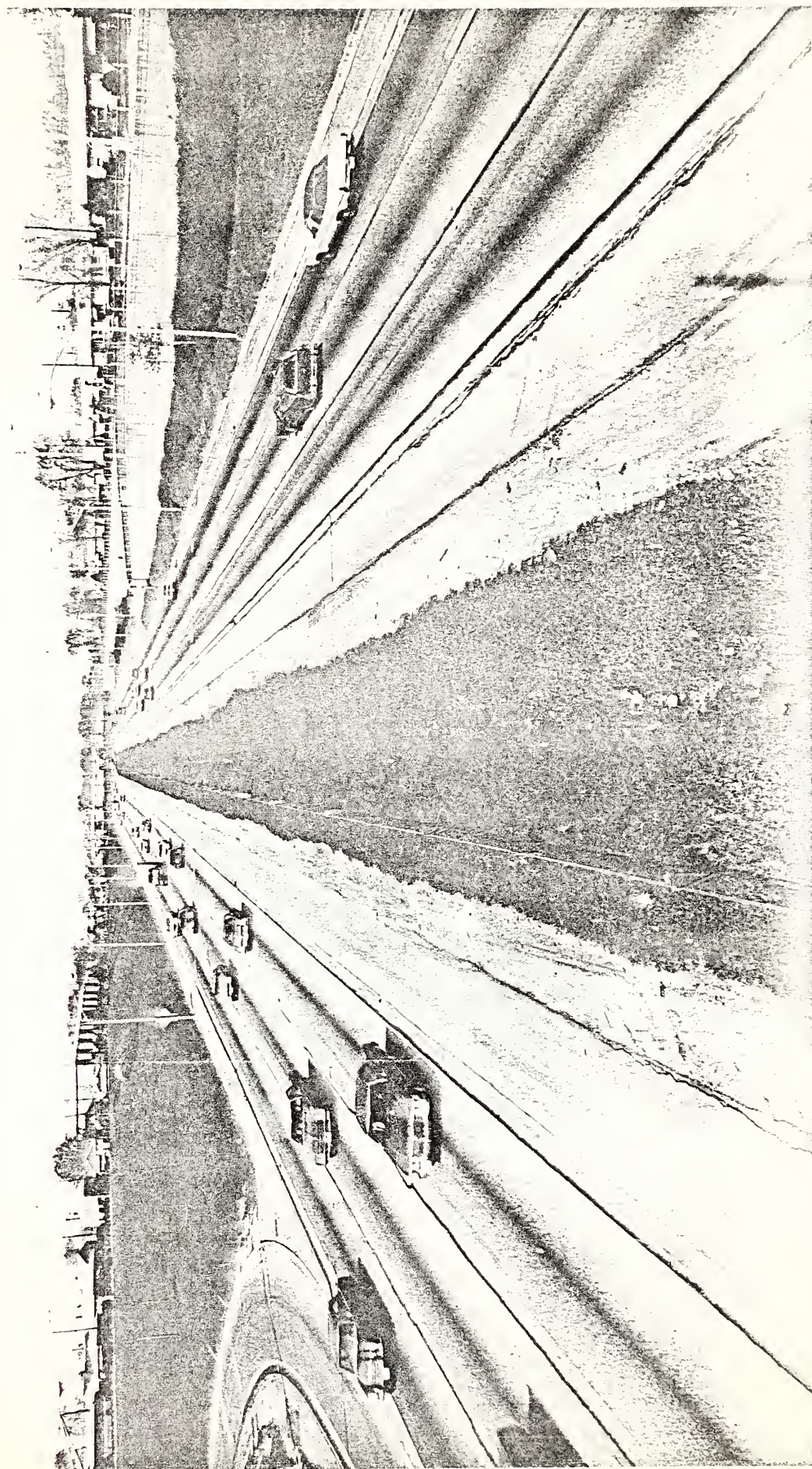
PHOTOGRAPH #2

Photograph #2 shows the inspection shop which was built as a temporary building in 1968-69. This building must be demolished to make way for the O'Hare Extension. The view is looking westward, or outbound, from the Foster Avenue bridge. The median barrier wall shown in the picture has already been located in the correct position to provide for the tracks of the extension.



PHOTOGRAPH #3

Photograph #3 shows the site of the Harlem Avenue station. The view is looking westward, or outbound, from the Harlem Avenue bridge. This also is the site where the expressway will be decked over with a two-level park-n-ride facility to be built on air rights over the expressway.

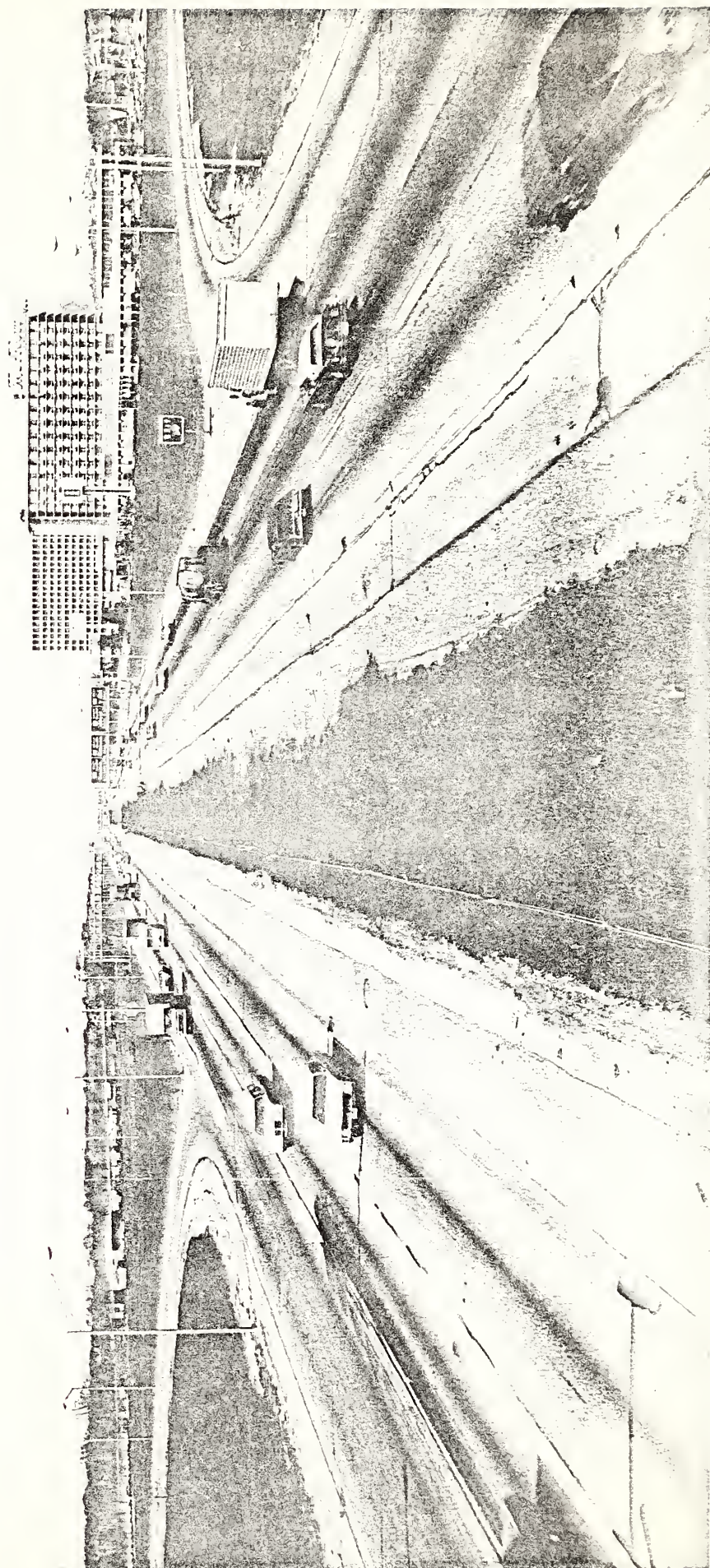




PHOTOGRAPH #4

Photograph #4 shows the site of the Cumberland Avenue station. The view is looking westward, or outbound, from the Cumberland Avenue bridge over the Kennedy Expressway. The entrance ramp in the left side of the picture is to be relocated. A two-story park-n-ride structure will be constructed on part of the land made available by this modification to the cloverleaf interchange. See enclosed drawing for further details.

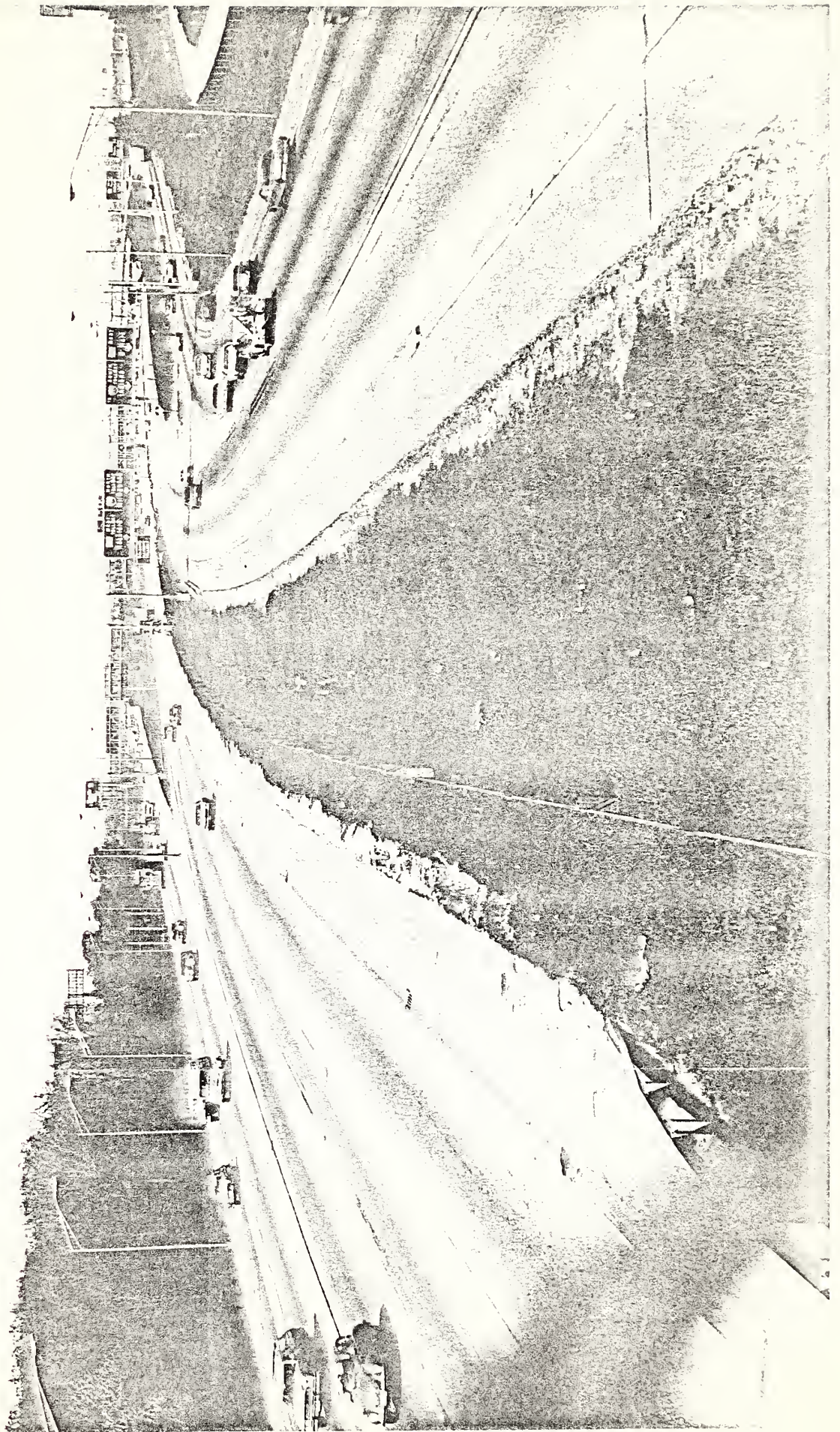
NOTE: This photograph, as well as the two preceding photographs, clearly depicts the vacant median in which the rapid transit tracks are to be laid. This median was provided for this purpose at the time the expressway was built. No right-of-way needs to be acquired in order to start construction of the project.





PHOTOGRAPH #5

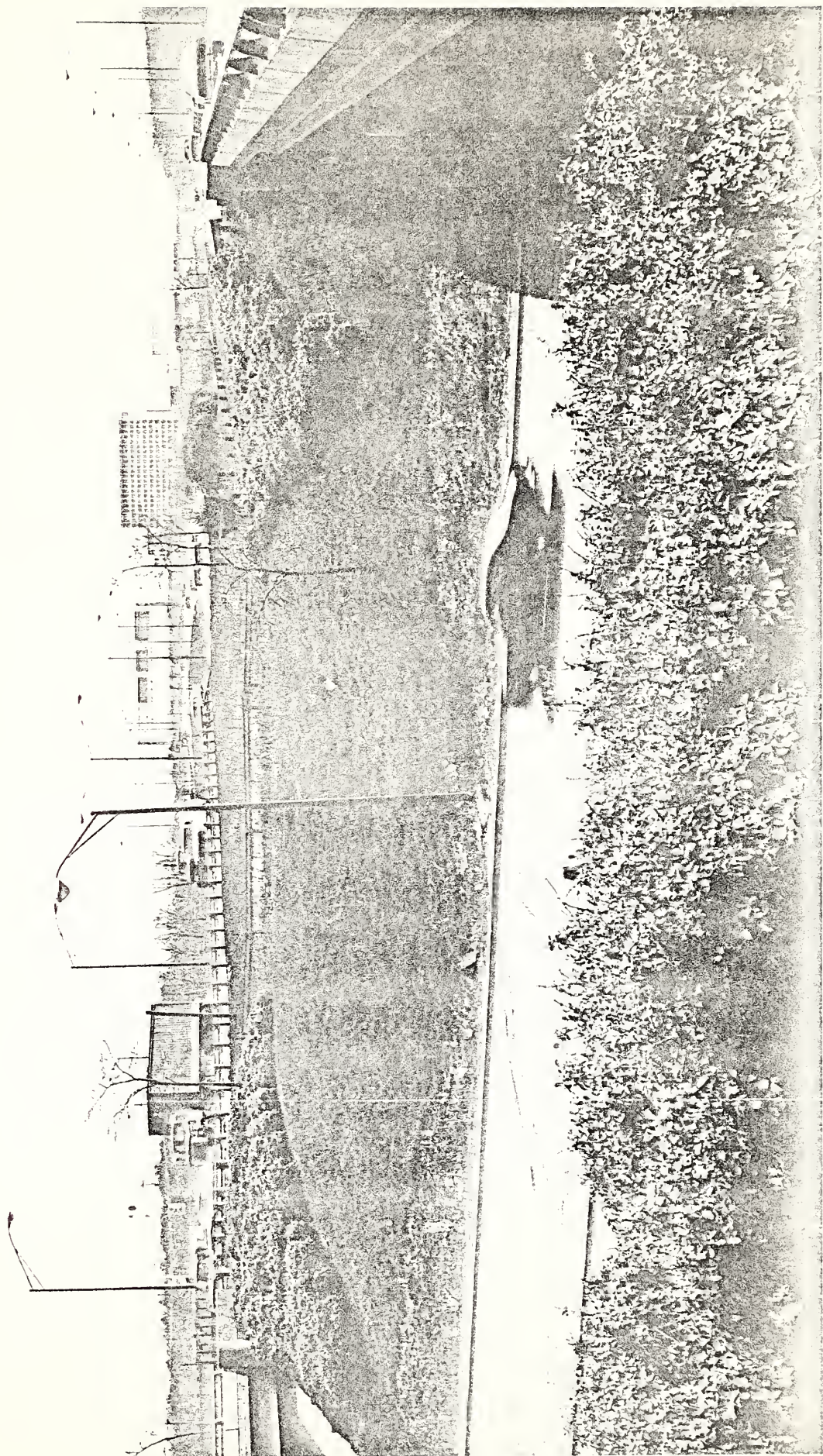
Photograph #5 is a view looking westward, or outbound, from East River Road. This picture shows where the tracks go into a short subway tunnel under the eastbound roadway of the Northwest Tollway, in order to pass into the median of the O'Hare Access Road which, from the viewpoint of the picture, is directly ahead under the left sign bridge.





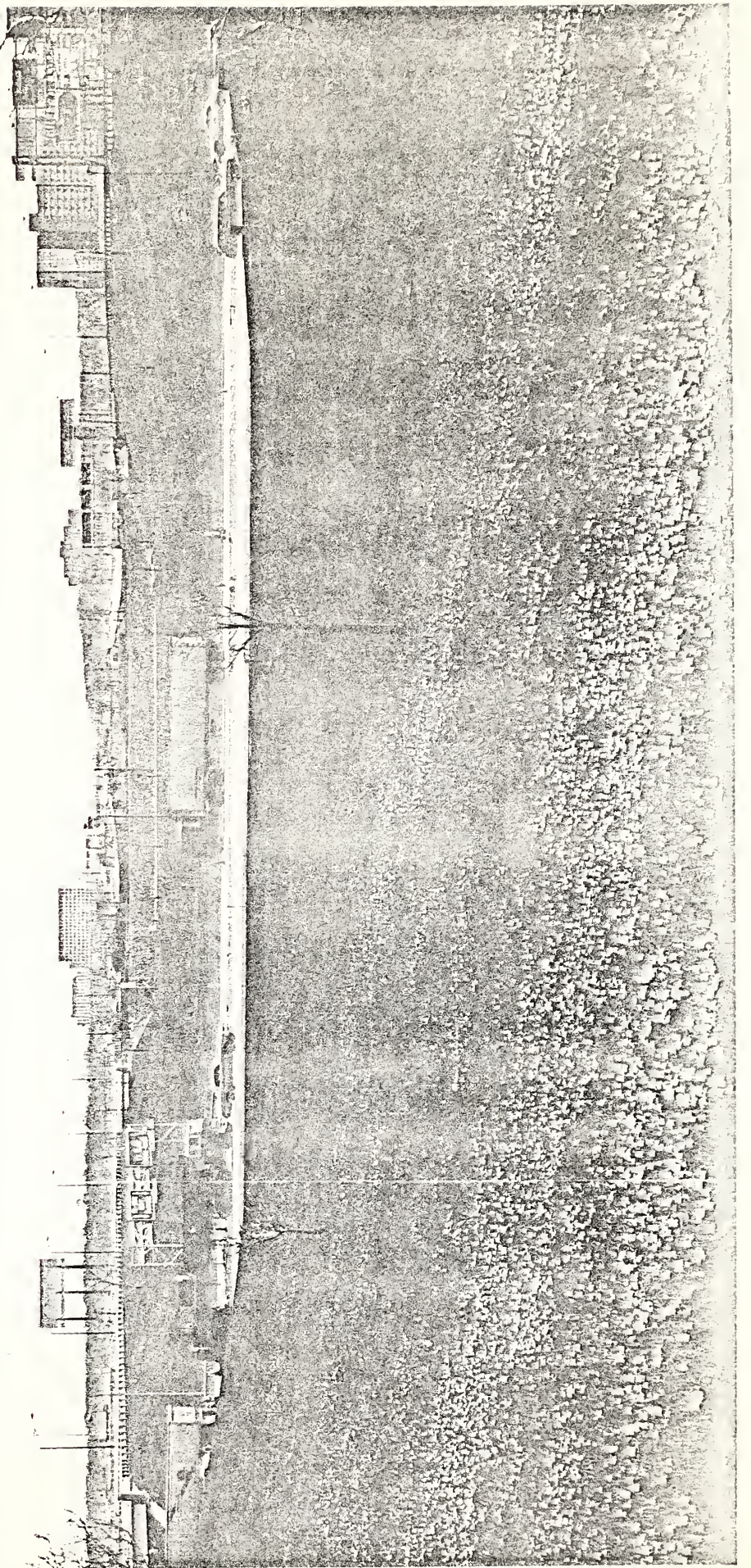
PHOTOGRAPH #6

Photograph #6 shows the site of the Des Plaines River Road Station. The view is looking eastward, or inbound. The station will bridge over the street and extend west of Des Plaines River Road for a distance of several hundred feet.



PHOTOGRAPH #7

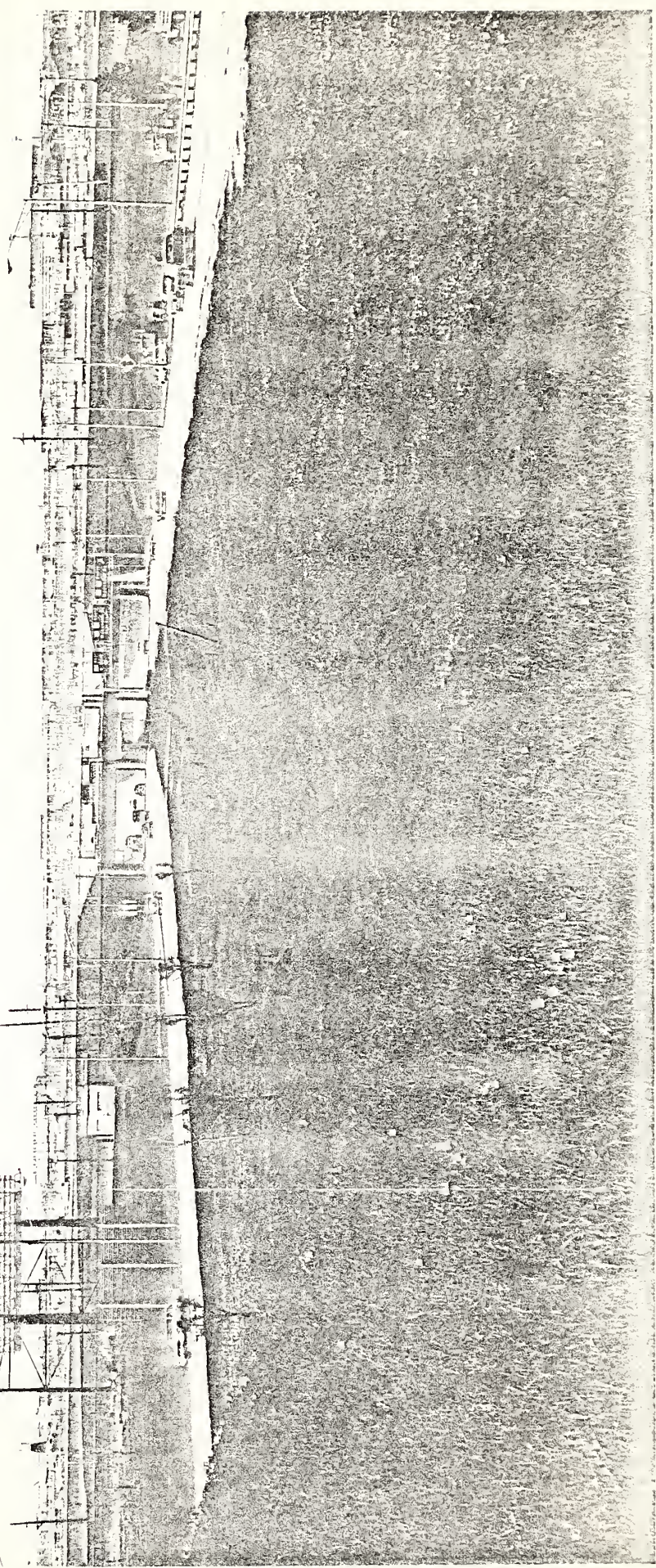
Photograph #7 shows the existing wide median in the O'Hare Access Road, within which the rapid transit car storage yard and maintenance facilities will be located. The view is looking eastward from Ramp J of the Tri-State Tollway toward the proposed Des Plaines River Road Station.





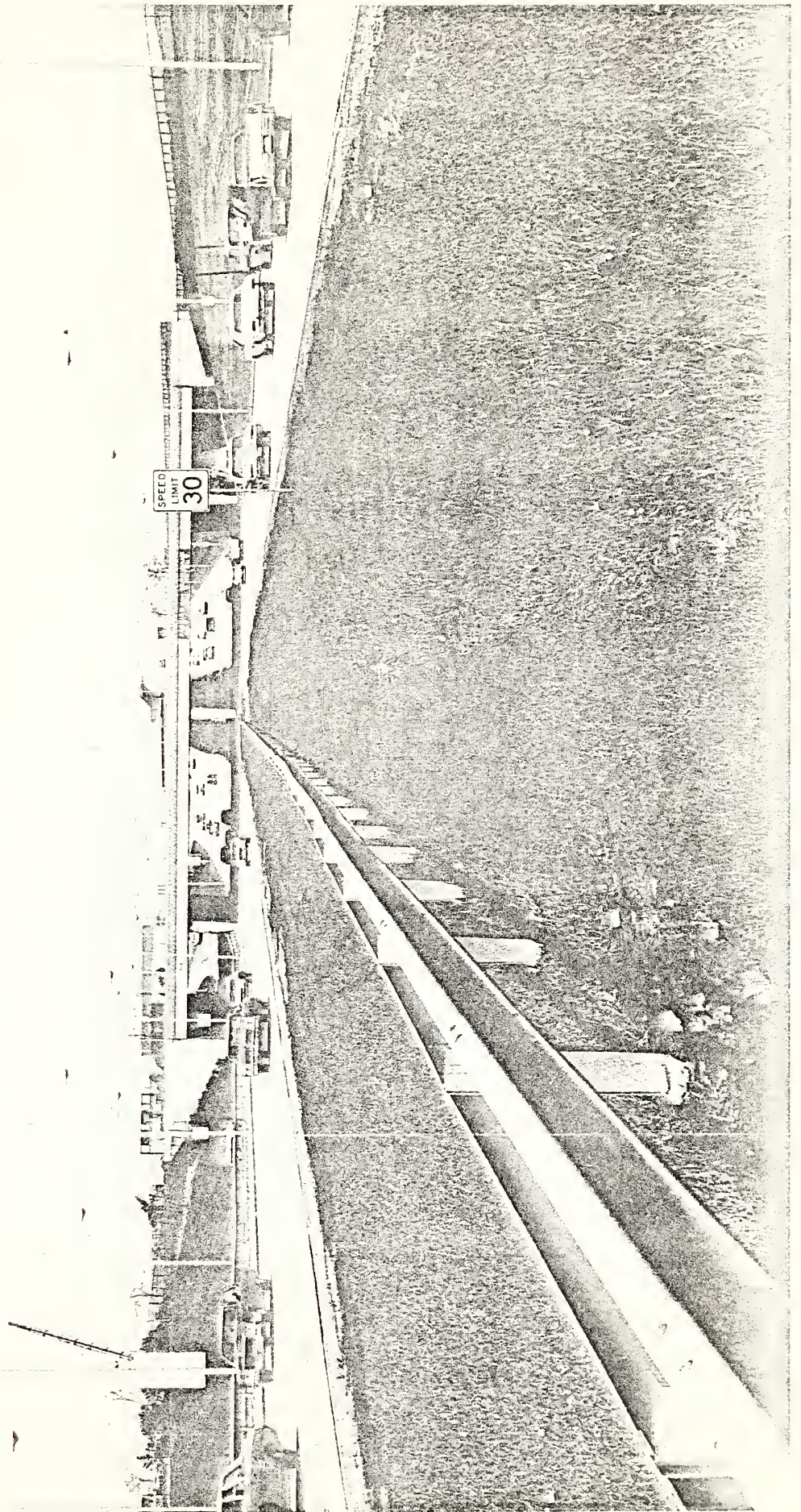
PHOTOGRAPH #8

Photograph #8 shows the double piers in the median, supporting the Soo Line Railroad. The track will go between these double piers as well as between the double piers supporting Mannheim Road, the next bridge behind the RR bridge. The domestic terminal buildings of O'Hare Field can be seen in the background on the right side of the picture. The view is from Ramp "J" looking west.



PHOTOGRAPH #9

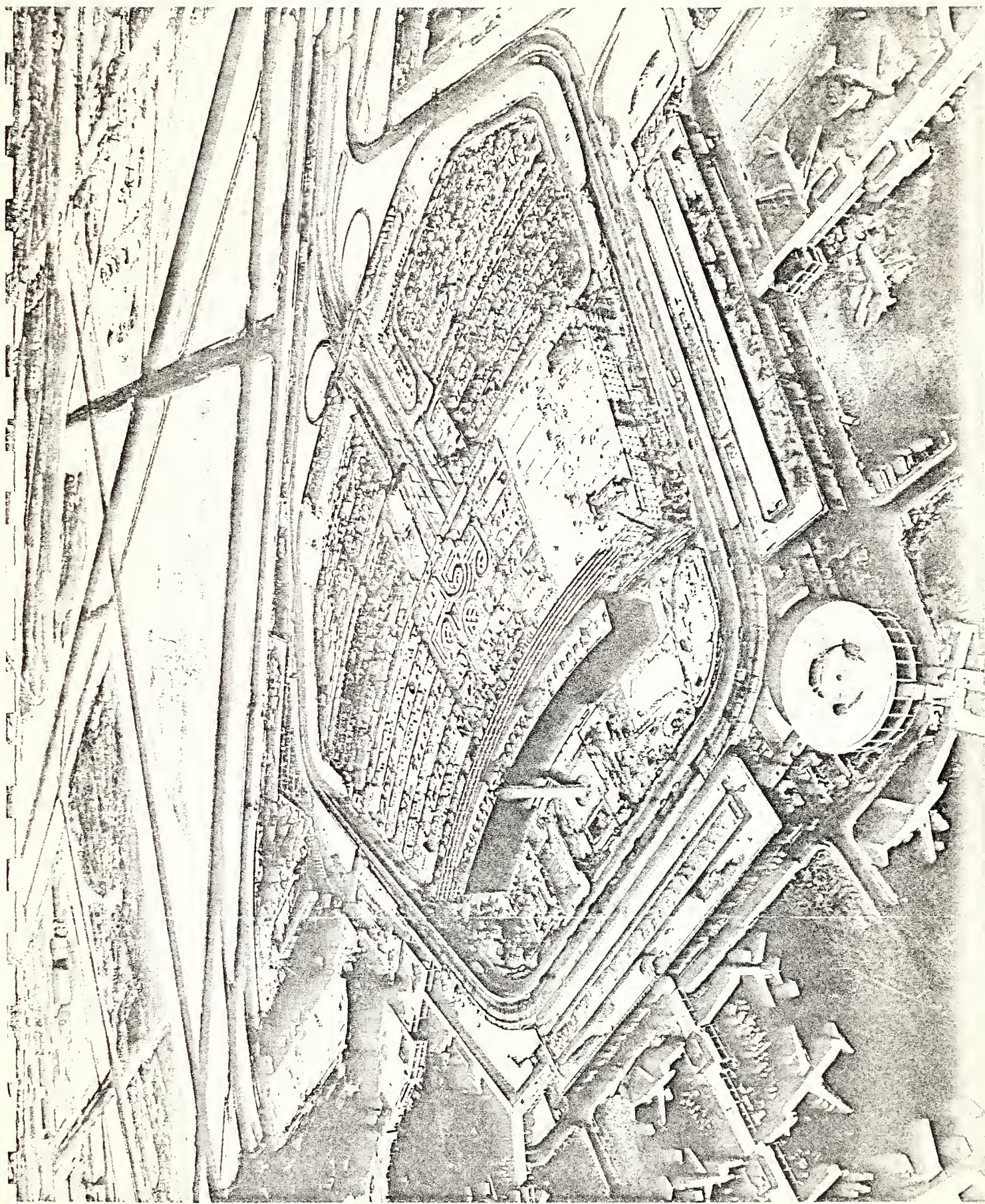
Photograph #9 shows the taxi-way bridge over the airport entrance road. The line goes into a subway just beyond the taxi-way bridge. This bridge, as all others along the route of the rapid transit extension, was designed with adequate clearance for the later addition of the rapid transit facility.





PHOTOGRAPH #10

Photograph #10 shows the entire domestic terminal area. The view was taken in winter showing snow on the ground. The subway will form a large single-track loop, generally following the route of the arrival/departure roadways past the terminal buildings in the foreground. A station would be located at each of the three buildings.



IV. Proposal (continued)

F. Project Benefits

Short Range

The most immediate and direct benefit will be to alleviate the stress on the highway access system, especially where the capacity constraint is critical, namely, the Kennedy Expressway.

It will benefit airport-user groups (air passengers, airport employees, and airport visitors) in that it will provide fast, economical, and convenient rapid transit service to and from the airport.

Non-airport oriented users of the rapid transit service will be able to commute to the CBD from the intermediate stations. The commutershed will encompass surrounding suburban communities as well as the City's far Northwest Side.

The Project will enable the more efficient operation of the airport itself by improving its ability to function as an inter-modal transfer facility.

Long Range

Having a fast, economical, and convenient rapid transit service to and from the airport will benefit the economy of the metropolitan area. Larger air passenger volumes means more employment, more business, more tax revenue. Ground access must be improved to handle the larger volumes; and the rail access alternative as recommended by the consultant Voorhees and as proposed by the City of Chicago is the most efficient and economical means of transporting large numbers of people in and through such a concentrated land area as the air terminal area. It is the most efficient and economical use of transportation corridor space, the most efficient and economical use of energy, and the fastest, safest, and most convenient means of public transport linking O'Hare with the CBD.

Not providing an alternative to alleviate the stress on the existing ground access system at O'Hare can only mean, at the very least, a massive traffic congestion problem, and at the very most, a leveling off or decline in air passenger traffic with its consequent negative effects on employment, business, and tax revenue.

IV. Proposal (continued)

G. Project Costs

SUMMARY

Federal Share	\$ 139,432,674	(80%)
State/Local Share	<u>34,858,169</u>	(20%)
TOTAL PROJECT COST	\$ 174,290,843*	(100%)

Federal Grant Request (UMTA)	\$ 139,432,674	(80%)
State Grant Request (IDOT)	23,238,780	(2/15 or 13-1/3%)
Local Share	<u>11,619,389</u>	(1/15 or 6-2/3%)
TOTAL PROJECT COST	\$ 174,290,843*	

* -- 1976 Dollars

IV. Proposal

G. Project Costs (continued)

COST ESTIMATE (3/11/74)

Subway Tunnel	\$ 43,186,963
Stations	16,029,575
Park-n-Ride Facilities	15,247,846
Track	7,980,636
Electrical Power System	6,301,056
Train Control & Communication	5,173,294
Median Preparation	5,253,746
Terminal Facilities	4,604,083
Sub-total 1974 Prices	\$ 103,777,199
15% Contingencies	15,566,580
	\$ 119,343,779
10% Engineering	11,934,378
Total - 1974 Prices	\$ 131,278,157
8% Escalation to 1975 Prices	10,502,253
Total - 1975 Prices	\$ 141,780,410
8% Escalation to 1976 Prices	11,342,433
Total - 1976 Prices	\$ 153,122,843
70 Rapid transit cars at \$302,400 each.	\$ 21,168,000
GRAND TOTAL - 1976 Prices	\$ 174,290,843

IV. Proposal

G. Project Costs (continued)

Appendix

The following is a category-by-category comparison of the cost estimate presented in Volume Two of the Voorhees Study, (Table II-1 on page 41) and the new cost estimate presented on the previous page.

Since the costs are not categorized in the same way in the two cost estimates, the following table compares the two cost estimates using the original estimate's categorization of costs.

Appendix Table: Comparison of Original and New Cost Estimates.

	<u>Original Estimate</u>	<u>New Estimate</u>	<u>Change</u>	<u>Reason for Change*</u>
<u>Civil ROW Work</u>				
Bridges	\$ 2,543,000	\$ 2,543,000	0	
Tunnels & Associated Misc.	18,153,000	31,260,000	+13,107,000	a
Grading and Walls	3,739,000	3,925,760	+ 186,760	b
Track	6,021,000	6,176,040	+ 155,040	c
Miscellaneous	445,000	2,338,450	+ 1,893,450	d
Sub-total:	\$30,901,000	\$46,243,250	+15,342,250	
<u>Station Construction</u>				
Airport Station Work	\$ 2,897,000	\$ 2,447,472	-449,528	e
Intermediate Stations & Parking	14,626,000	19,180,442	+ 4,554,442	f
Terminal Facilities	4,803,000	4,803,000	0	
Sub-total:	\$22,326,000	\$26,430,914	+ 4,104,914	
<u>Power and Electrification</u>				
Sub-stations	\$ 1,995,000	\$ 2,355,000	+ 360,000	g
Electrification	2,470,000	2,521,250	+ 51,250	h
Sub-total:	\$ 4,465,000	\$ 4,876,250	+ 411,250	
<u>Signals and Controls</u>				
Signal System	\$ 2,614,000	\$ 2,658,720	+ 44,720	i
Communication System	1,313,000	1,344,780	+ 31,780	j
Sub-total:	\$ 3,927,000	\$ 4,003,500	+ 76,500	
Allowance for Costs due to Internal Airport System	(1,240,000)	(1,240,000)	(0)	
Engineering and Contingencies	9,121,000		- 9,121,000	
Sub-total 1970 prices:	\$69,500,000	\$80,313,914	+10,813,914	
Escalation to 1974	22,935,000	23,463,285	528,285	
Sub-total 1974 prices	\$92,435,000	\$103,777,199	+11,342,199	
15% Contingencies		15,566,580	+15,566,580	k
Sub-total		\$119,343,779		
10% Engineering		11,934,378	+11,934,378	l
Total 1974 prices		\$131,278,157	+38,843,157	
8% Escalation to 1975 prices		10,502,253	+10,502,253	m
Total 1975 prices		\$141,780,410		
8% Escalation to 1976 prices		11,342,433	+11,342,433	n
Total 1976 prices		\$153,122,843		
70 rapid transit cars at \$302,400 ea.		21,168,000	+21,168,000	o
GRAND TOTAL, 1976 prices:		\$174,290,843	+81,855,843	

* -- Reasons listed on next page.

Appendix Table (continued)

There are three basic reasons for the differences in the estimates and they are as follows:

- (i) Costs previously charged to the PDS project, but are now charged to O'Hare Extension project due to the need to include certain provisions for the future internal airport systems.
- (ii) Costs previously shared by O'Hare Extension and IA projects, but are now fully charged to the O'Hare Extension project due to the need to include certain provisions for the future internal airport systems.
- (iii) Additional station and park-n-ride facility at Cumberland Avenue.

A. Costs changed by one of three above reasons	Reason for change (i, ii, or iii)
(small letters before each item correspond to letters in <u>Appendix Table</u> on previous page)	
a. PDS upper level tunnel shared CTA-IA tunnel	(i) (ii)
b. walls at Cumberland Avenue Station	(iii)
c. shared CTA-IA track and special trackwork	(ii)
d. utility relocation	(i)
e. elimination of CTA-IA transfer station shared CTA-IA stations at O'Hare	(ii) (ii)
f. addition of Cumberland Station and Park-n-Ride	(iii)
g. shared CTA-IA substation at O'Hare	(ii)
h. shared CTA-IA track electrification	(ii)
i. shared CTA-IA track signals	(ii)
j. shared CTA-IA communications	(ii)

Appendix Table (continued)

B. Costs changed by other reasons

k. contingencies and engineering increase
and due to current price fluctuations
l.

m. escalation to 1975 prices

n. escalation to 1976 prices (anticipated
mid-year of construction)

o. addition of 70 rapid transit cars

DRAWING:

CUMBERLAND STATION



AFR 4866